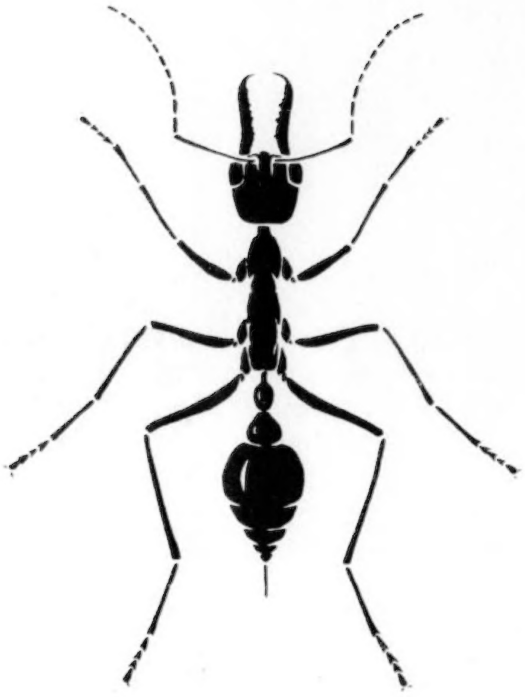
Australian Entomological Society



News Bulletin

Volume 16, Part 4, November 1980

Registered for Posting as a Publication Category (B)

Price: $1.25

AUSTRALIAN ENTOMOLOGICAL SOCIETY

OFFICE BEARERS

President:	Dr. I.F.B. Common
Vice President:	Dr. E. Shipp
Secretary:	Dr. K.R. Brown
Assistant Secretary:	-
Treasurer:	Mr. G.A. Holloway
Assistant Treasurer:	-
Business Manager:	Mr. J. Donaldson
Assistant Business Manager:	-
Public Officer:	Dr. P.B. Carne
Chief Editor:	Dr. G.H.S. Hooper
General Editor:	Dr. B.P. Moore
Taxonomic Editor:	Dr. B. Domrow
Assistant Editor:	Mr. P.D. Webb
News Bulletin Editors:	Dr. P. Williams
	Mr. P.M. Ridland

REGIONAL COUNCILLORS

Queensland:	Dr. G.B. Monteith
	Mr. A.P. Walford-Huggins
New South Wales:	Mr. D.R. Smith
	Mr. N.W. Forrester
A.C.T.:	Dr. R.W. Taylor
	Mr. T.A. Weir
Victoria:	Dr. A.A. Calder
	Mr. P.M. Ridland
Tasmania:	Mrs. M.A. Williams
South Australia:	Mr. D. Hopkins
Western Australia:	Dr. J.D. Majer
Papua New Guinea:	Dr. E.J. Brough

REPRESENTATIVE COUNCILLORS

Entomological Society of Queensland:	Dr. N.W. Heather
Entomological Society of Victoria:	Mr. D.J. Stewart
Royal Zoological Society of N.S.W.:	Mr. C.E. Chadwick
Entomological Society of Australia (NSW):	Dr. A.D. Clift

ADDRESS FOR CORRESPONDENCE

News Bulletin Editors: c/o Plant Research Institute, Swan Street, Burnley, Vic. 3121 (Telephone 03 810 1511)

Executive: c/o School of Biological Sciences F07, University of Sydney, Sydney, N.S.W., 2006 (02 692 2211)

ADDRESSES OF REGIONAL COUNCILLORS

Qld. Mr. A.P. Walford-Huggins, P.O. Box 17, Molloy, Queensland, 4880

Dr. G.B. Monteith, 22 Raglan Street, St. Lucia, Queensland, 4067 (Telephone 07 371 2621).

N.S.W. Mr. D.R. Smith, C.S.I.R.O., Division of Applied Organic Chemistry, c/o School of Zoology, University of N.S.W., P.O. Box 1, Kensington, New South Wales, 2033 (Telephone 02 663 0351).

Mr. N.W. Forrester, Agricultural Research Centre, R.M.B. 944, Tamworth, New South Wales, 2340 (Telephone 067 67 9300).

A.C.T. Dr. R.W. Taylor, Division of Entomology, C.S.I.R.O., P.O. Box 1700, Canberra City, A.C.T., 2601 (Telephone 062 46 4911).

Mr. T.A. Weir, Division of Entomology, C.S.I.R.O., P.O. Box 1700, Canberra City, A.C.T., 2601 (Telephone 062 46 4911).

Vic. Mr. P.M. Ridland, Plant Research Institute, Swan Street, Burnley, Victoria, 3121 (Telephone 03 810 1511).

Dr. A.A. Calder, Department of Entomology, National Museum of Victoria, 71 Victoria Crescent, Abbotsford, Victoria, 3067 (Telephone 03 419 5200).

Tas. Mrs. M.A. Williams, Department of Agriculture, St. John's Avenue, New Town, Tasmania, 7008 (Telephone 002 28 4851).

S.A. Mr. D. Hopkins, Department of Agriculture & Fisheries, Northfield Laboratories, G.P.O. Box 1671, Adelaide, South Australia, 5001 (Telephone 08 261 3288).

W.A. Dr. J.D. Majer, Department of Biology, W.A. Institute of Technology, Hayman Road, South Bentley, Western Australia, 6102 (Telephone 09 350 7700).

P.N.G. Dr. E.J. Brough, Biology Department, University of Papua New Guinea, Box 4820, University P.O., Papua New Guinea.

CONTENTS

Executive Report 111

Notice of Annual General Meeting 114

Nomination of Officers and Councillors for 1981/82 115

12th AGM 8th - 10th May, 1981 117

Student Research Award 1981 118

Entomological News Around Australia

- Victoria 119
- New South Wales 120
- Queensland 124
- South Australia 128
- Western Australia 129
- Papua New Guinea 130

News from Affiliated Societies

- Royal Zoological Society of New South Wales 131
- Entomological Society of Queensland 134

Third Australasian Conference on the Ecology of Grassland Invertebrates 135

Requests 136

Advertising Rates 137

Addresses Unknown 138

Sustaining Associates 138

EXECUTIVE REPORT

Meeting:

The Executive met on 18th September and 21st October, 1980.

Membership:

Since the last report 13 members have been elected and total membership now stands at 593. The geographical distribution is as follows:

NSW	117	VIC	85	WA	28
QLD	138	SA	47	NT	7
ACT	88	TAS	22	PNG	17
OVERSEAS	44				

New Members:

We extend a warm welcome to the following members:

Elected 18th September, 1980

- Mr. Kevin P. Bodnaruk, 2/53 George Street, Wee Waa, New South Wales, 2388. Mr. Bodnaruk is an Extension Officer whose interests are crop pest management and insect plant relationships with reference to cotton and other field crops.
- Mr. Murray Ellis, 36 Percival Street, Bexley, New South Wales, 2207. Mr. Ellis is an undergraduate student majoring in Entomology at the University of New South Wales. He is particularly interested in the Mantodea.
- Mr. Desmond H. Foley, 4/48 Beatrice Street, Taringa, Queensland, 4068. Mr. Foley is a postgraduate student at the University of Queensland. Current interests are insect behaviour and physiology.
- Dr. Clifford P. Ohmart, C.S.I.R.O., Division of Forest Research, P.O. Box 4008, Canberra, A.C.T., 2600. Dr. Ohmart is a Research Scientist with C.S.I.R.O. and is working in forest entomology, in particular, insects in pine plantations.

- Mr. Liu Shu-sheng, C.S.I.R.O., Division of Entomology, P.O. Box 1700, Canberra City, A.C.T., 2601. Mr. Shu-sheng is a Chinese University student on a 3 year traineeship with the Division. He is interested in biological control of insect pests and shall be working on the pea aphid during his stay. An especial welcome to the Society!
- Dr. Dudley E. Pinnock, Department of Entomology, University of Adelaide, Waite Agricultural Research Institute, Glen Osmond, South Australia, 5064. Dr. Pinnock is Reader in Insect Pathology.
- Dr. Noel Richardson, 9 Chamberlain Road, Willaston, South Australia, 5118. Dr. Richardson is a Senior Lecturer at Roseworthy Agricultural College.
- Mrs. Judith King, 20 Kersley Road, Kenmore, Queensland, 4069. Mrs. King is a postgraduate student interested in the Australian Megachilidae. She is also a Tutor (Systematics).

Change of Address: (State of previous residence in brackets)

Dr. A.R.P. Journet, Department of Biology, Southeast Missouri State University, Cape Girardeau, Missouri, 63701, U.S.A. (U.S.A.).

Mr. L.R. Greenup, 244 Quarter Sessions Road, Westleigh, New South Wales, 2120 (N.S.W.).

Mr. A.S. Molyneux, C.S.I.R.O., Division of Entomology, Stowell Avenue, Hobart, Tasmania, 7000 (Qld.).

Mr. P.L. Walker, 652 Drummond Street, North Carlton, Victoria, 3054 (Vic.).

Mr. P.P. Stahle, Plant Research Institute, Swan Street, Burnley, Victoria, 3121 (Vic.).

Mr. G.J. Snowball, R.M.B. 6155, Lisarow, New South Wales, 2251 (N.S.W.).

Mr. J.C. Herremans, P.O. Box 291, Manly, New South Wales, 2095 (N.S.W.).

- Mr. W.J. Webster, 4/17 Muir Street, Hawthorn, Victoria, 3122 (Vic.).
- Mr. C.R. Maclellan, Box 775, Kentville, Nova Scotia, Canada (Canada).
- Mr. I. Kay, Department of Primary Industry, P.O. Box 591, Ayr, Queensland, 4807 (Qld.).

THE AUSTRALIAN ENTOMOLOGICAL SOCIETY INC.

NOTICE OF ANNUAL GENERAL MEETING

The Society's Twelfth Annual General Meeting will be held at 1600 hours on Saturday, 9th May, 1981, at the Wayamba Holiday Convention Centre, Alexandra Headland, Queensland. Copies of the Annual Report and Audited Accounts will be available at the Meeting.

Should you wish to appoint a proxy to represent you at the meeting, kindly complete and return the attached proxy nomination form to me by 20th April, 1981. That date is also the deadline for the receipt of advice of any matters that you wish to have added to the agenda under Item 11.

Agenda

1. Apologies.
2. Announcement of proxies.
3. Deaths recorded since 11th Annual General Meeting.
4. General Announcements.
5. Minutes of 11th Annual General Meeting (sent to members in News Bulletin 16 (3), August 1980).
6. Annual Report of Executive.
7. Treasurer's Report and Audited Accounts.
8. Appointment of Auditor.
9. Announcement of Officers and Councillors for 1981/82.
10. Place, date and nature of 13th Annual General Meeting.
11. Other business as arranged.
12. Closure.

Kenneth R. Brown
Secretary

THE AUSTRALIAN ENTOMOLOGICAL SOCIETY INC.

NOMINATION OF OFFICERS AND COUNCILLORS FOR 1981/1982

In accordance with the provisions of the Society's Constitution, I call for nominations for the offices of President and of the Regional Councillors in each state and in the Australian Capital Territorys and Papua New Guinea.

The positions (with a list of current officer bearers) for which nominations are invited are:

President:	Dr. I.F.B. Common
Regional Councillors:	
Papua New Guinea	Dr. E.J. Brough
Queensland (2)	Dr. G.B. Monteith
	Mr. A.P. Walford-Huggins*
New South Wales (2)	Mr. D.R. Smith
	Mr. N.W. Forrester
A.C.T. (2)	Dr. R.W. Taylor*
	Mr. T.A. Weir
Victoria (2)	Dr. A.A. Calder
	Mr. P.M. Ridland
South Australia	Mr. D. Hopkins
Tasmania	Mrs. M.A. Williams
Western Australia	Dr. J.D. Majer*

*Regional Councillors denoted thus, are not eligible for re-election having served in this office for 3 consecutive annual terms.

The attention of members is drawn to the nomination form for officers and councillors for 1981/82 which is enclosed with the News Bulletin. Nominations must be returned to the Secretary not later than 29th March, 1981.

If an election is required, a postal ballot will be held and candidates will have the opportunity of presenting a statement about their candidature to the members. In view of the tight deadlines, candidates are alerted that their short statements (no longer than 100 words) will be required as soon as possible after the closing date for nominations.

Kenneth R. Brown
Secretary

12TH ANNUAL GENERAL MEETING
8th - 10th May, 1981

The 12th Annual General Meeting of the Australian Entomological Society will be held in Queensland in May, 1981. The conference venue is to be the Wayamba Holiday and Convention Centre at Alexandra Headland on the popular Sunshine Coast 100 km north of Brisbane. It is scheduled for a 3 day period (Friday, 8th May - Sunday, 10th May) immediately prior to the 1981 ANZAAS Conference which takes place at the University of Queensland in Brisbane during the week of 11th - 17th May.

The programme will commence at midday on the Friday and will terminate after lunch on the Sunday. It will include a welcoming function hosted by the Entomological Society of Queensland, a formal Society Dinner, the Annual General Meeting, a Presidential Address by Dr. I.F.B. Common, entomological displays, a full programme of six scientific sessions, and will terminate with a barbecue lunch in a rainforest area where collecting is permitted.

Part of the scientific programme will be devoted to a major symposium on "Perspectives on Entomology in the Tropics" and the remainder will consist of contributed papers arranged, where possible, into thematic groups.

The Sunshine Coast is serviced by direct flights from Sydney to Maroochydore airport which arrive Friday morning and return Sunday afternoon. A bus will be chartered to carry interstate delegates who wish to return to Brisbane for the ANZAAS meeting.

The organizing committee estimate that total costs for the weekend, exclusive of travel, but including shared accommodation, all meals and Registration will be about $80. Full details of the programme and costs are included on the leaflet enclosed with this News Bulletin which also includes forms for enrolling delegates, contributed papers and displays.

Queensland members join in inviting their interstate colleagues to what should be a productive conference in a pleasant setting.

STUDENT RESEARCH AWARD 1981

Purpose: To encourage interest in entomology by students in Australia.

Number offered: One Award at intervals of approximately 12-18 months.

Value: A cash award of $25, registration and accommodation at a general scientific meeting of the Society, and return air fare from the student's usual place of residence to the meeting. The next meeting of the Society is scheduled to be held at Alexandra Headland in May 1981 prior to the ANZAAS Congress in Brisbane.

Eligibility: Open to full time bone fide students.

The Award will be made for the best paper reporting original entomological research conducted by the entrant prior to, or within two year's of, gaining his/her first degree.

It will be judged by a committee appointed by the Executive. The paper should be in a form suitable for presentation within 15 minutes to an audience of general entomologists. The winner is expected to read his/her paper and receive the Award in person at the scientific meeting held in that year.

Application: Application forms may be obtained from the Secretary, Australian Entomological Society Inc., Dr. K.R. Brown, School of Biological Sciences F07, University of Sydney, New South Wales, 2033. For the 1981 Award, Research Papers should be typed and three copies should reach the Secretary no later than 28th February, 1981. The Executive reserves the right to withhold the Award if in the opinion of the judges there is no entry of sufficient merit.

ENTOMOLOGICAL NEWS AROUND AUSTRALIA

VICTORIA:

Plant Research Institute

In October, we farewelled John Webster who was retiring from the Department of Agriculture after many years service in the Goulburn Valley. John was based at the Irrigation Research Institute, Tatura, where he worked mainly on insect and mite pests of pome and stone fruits. We wish John a long and fruitful retirement.

Also in October, we farewelled Norman Morgan who was returning to the U.K., via New Zealand, after spending a most stimulating twelve months as Visiting Scientist at P.R.I. Norman really "spread the gospel" about his work on pesticide application techniques. In Australia, he spoke about his work on 26 occasions and while "recuperating" in New Zealand for a month he delivered a further 17 lectures and 6 seminars!

Garry McDonald and Mark Smith have commenced their project on the prediction of armyworm outbreaks in Victorian cereals and pastures. Six light traps (U.S.D.A. Blacklight design) have been located at various locations throughout the state. The traps were set up in time for the Bogong moth flights during October, which provided the inexperienced sorters with plenty of practice.

C.S.I.R.O., Division of Building Research, Highett

While John French was in Queensland recently to give a talk on Urban Forestry, he went collecting buprestids with Ross Wylie at Beerwah. He also caught up with Peter Room and Barry Grey (ex-forest entomologist in Papua New Guinea, now entrepeneur-real estate, toy shop and travel agency)

National Museum of Victoria

Andrew Calder is leaving the Museum in January, to take a position at A.N.I.C. as the Second Coleopterist, specializing in weevils.

Arturs Neboiss has just completed a successful 3 week field trip in the Gympie area of south-east Queensland where he was collecting caddis flies.

Dick Vane-Wright (B.M.) visited in late October to examine the Curtis collection and the foreign Lepidoptera holdings. Rod Griffin (C.S.I.R.O., Division of Forest Research) came for discussions about noctuids infesting eucalypts. Other visitors to the Museum included Dr. Antti Jansson (Zoological Museum, University of Helsinki) who examined Corixidae types, Professor C. Reichardt (Providence, Rhode Island) who also was looking at water bugs, and Dr. Jeekel (Institute of Taxonomic Zoology, Amsterdam) who was looking at millipedes.

Monash University

Robert Raven (Queensland Museum) visited in July to discuss arachnid systematics with Mark Harvey. During August, Mark undertook a most successful collecting trip in Northern Territory and Queensland.

Peter Ridland

NEW SOUTH WALES:

Country Centres

The New South Wales Department of Agriculture hosted the fourth "Integrated Pest Control Workshop" concerned with deciduous fruit pests. It was held at the Yanco Agricultural Research Centre on 27th - 28th August and was convened by resident Entomologist Edwin Jones. Ten entomologists working on deciduous fruit pests in South Australia, Victoria, New South Wales and C.S.I.R.O. attended. Special guest was Dr. Harold Madsen, Summerland Research Station, British Columbia, Canada.

Dr. Madsen is visiting Australia on a "transfer of work" agreement between the Canada and New South Wales Departments of Agriculture and the C.S.I.R.O. Division of Entomology. He arrived in Sydney in mid-August from the International Congress of Entomology, spent a week at Canberra with Dr. George Rothschild and then travelled to Yanco for the I.P.C. Workshop. He is now located at the Agricultural Research and Veterinary Centre, Orange, working with Graham Thwaite and George Rothschild on the use of sex pheromone traps for monitoring codling moth and oriental fruit moth. Harold expects to be in Australia for a total of ten months.

Colin Bower and Graham Thwaite have finally moved out of Bathurst Agricultural Research Station and are now working from the recently completed Agricultural Research and Veterinary Centre, Orange. The entomology section is a major component of the $3.5M building to house regional agricultural research staff and veterinary diagnostic and research personnel.

Dr. Norman Morgan, from the Long Ashton Research Station in Bristol, England and at the time working at the P.R.I., Burnley, made his second visit to Orange in August to address a meeting of fruit growers on spray application technology. Norman made a brief visit to Orange and Bathurst in March this year and his comments at that time created much interest amongst Department of Agriculture people and fruit and vegetable growers.

Four country entomologists attended the Heliothis Workshop held at Toowoomba in September. They were Bill Palmer, Penny Ives and Angus Wilson from Narrabri, and Neil Forrester from Tamworth.

Dave Dowling has just been appointed as a senior technical officer by the New South Wales Department of Agriculture to act as development officer for SIRATAC in the Gwydir Valley. Dave is a graduate in botany from the University of New England.

Ken Brooks has arrived at the Narrabri Agricultural Research Station to take up the position of Experimental Officer with C.S.I.R.O. He will be working on the computing side of the SIRATAC programme and will be involved in the production of a manual for grower use. Ken comes from the Integrated Pest Management Unit at the University of Queensland.

Lyndsay and Anne Tuart have just returned from an overseas trip studying cotton pest management in Israel, Egypt, India and the Sudan. Lyndsay, now a freelance cotton scout, was formerly the New South Wales Department of Agriculture cotton entomologist at Narrabri.

Paul Sullivan has just been appointed as technical officer with the Prickly Pear Commission to work with John Hosking at Tamworth. Paul was formerly a supervisor for the Commission at Mudgee.

Gus Campbell, Reg Roberts and Bob Davidson attended a conference on Eucalyptus Dieback in Forests and Woodlands held in August at Canberra. The Conference was convened by C.S.I.R.O. Division of Forest Research.

Biological and Chemical Research Institute

Greg Shanahan has recently retired after approximately forty years with the department working on sheep blowfly resistance.

Max and Barbara Moulds visited B.C.R.I. on 3rd September to look at the Sphingid collection.

Mr. J.R. Hallam, M.L.C., Minister for Agriculture, and Mr. G. Knowles, Director General of Agriculture, visited B.C.R.I. on 17th September.

Densey Cline visited on 3rd September to look at the general insect collection and to discuss rearing of crickets with Graham Goodyer.

A workshop on the quarantine examination of honey bees, particularly for Isle of Wight Disease, was held at B.C.R.I. from 20th - 24th October. It was attended by departmental officers and others interested in disease detection. Among the participants were Mr. Paul Brilis and Mr. Joe Waugla of the Papua New Guinea Department of Primary Industries.

C.S.I.R.O., Division of Entomology, Kooyong Research Station

Brian Fletcher is currently spending a month on the Greek island of Corfu advising on fruit fly ecology for the F.A.O.

Alan Bateman leaves shortly for New Zealand where he will advise on a plan of attack for the detection and control of exotic fruit fly species.

University of Sydney

Fred McDonald has been granted special leave over the Christmas break to visit Louisiana State University for further work on the North American Pentatomids.

Bob Graham is completing his diploma in Agricultural Entomology. His project involved the effect of storage of insect tissue in liquid nitrogen on mfo activity.

A Wool Corporation scholarship has been awarded to Mary Ann Terras who will determine the likelihood of the sheep blowfly becoming resistant to Vetrazin.

Andrew Rath, an honours student in zoology, has recently completed his research project on the inhibition of microsomal oxidase by phenyl oxidase in the housefly.

Neil Forrester, Don Smith

QUEENSLAND:

University of Queensland

Overseas students Syed Hassan (Malaysia) and Kwasi Ampofo (Ghana) have returned home after submitting PhD theses on, respectively, distribution of eggs and larvae of Heliothis on cotton with respect to spray droplets, and agronomic characteristics of cotton as pest management tools.

Richard Piper has enrolled for Honours under the supervision of Tom Woodward and will study aspects of the morphology of lygaeid bugs of the tribe Rhyparochromini.

Bee taxonomists, Elizabeth Exley and Ken Walker, visited the Australian National Insect Collection at C.S.I.R.O. Canberra for a week in November.

Gordon Hooper spent ten days in Perth in late October visiting the Department of Agriculture to examine and advise on the Mediterranean fruit fly problem.

Professor H. Van Emden, authority on aphids and pest management from the University of Reading, United Kingdom, spent four weeks in the Department of Entomology in October as a University Visiting Professor.

Griffith University

Roger Kitching returns temporarily to the fold at Oxford University on six months study leave commencing in early December.

Butterfly visitors to Griffith in recent months have included Alec Panchon of the University of Newcastle and Dick Vane-Wright of the British Museum. Both have interests in the mimicry patterns and behaviour of distasteful butterflies and were able to speak with postgraduate students working on butterfly projects at Griffith. Dick also renewed acquaintance with fellow butterfly taxonomist, Don Sands, at the C.S.I.R.O. Long Pocket Laboratories.

Lands Department

Clyde Wild has returned to the Sherwood Laboratory after 3 years in Londrina, southern Brazil, searching for potential biocontrol agents for Parthenium weed. One of his discoveries, a weevil, is already in quarantine in Brisbane for testing.

Congratulations to Paul McFadyen on the award of his PhD on the basis of a thesis devoted to South American insects for the biological control of groundsel bush, Baccharis balimifolia.

Queensland Museum

Advantage was taken of Ian Common's brief visit to the Museum in September to have a small gathering of butterfly people. The main topic of interest was the viewing of Doug Binns' new Australian record of an Asian pierid which he took recently in the Kimberleys. Doug came up from his base in Urbenville, New South Wales, for the day.

Hopefully the taxonomy of Australian millipedes will start to move with the visit of Dr. C.A.W. Jeekel, Director of the Institute of Taxonomic Zoology at the University of Amsterdam, who visited the Museum in late September at the beginning of a collecting tour of eastern Australia. His particular interest concerns the family Paradoxosomatidae which shows southern relationships.

Geoff and Sybil Monteith reported captures of a new species of the recently described orthopteran family Cooloolidae ("Cooloola Monsters") and of terrestrial dragonfly nymphs during a "busman's" holiday to North Queensland in October.

Department of Primary Industries

Transfers of entomologists in the field stations include Geoff Waite and Dave Murray who have swapped places from their former postings at Emerald and Nambour, respectively. Ian Kay has moved from Mareeba to open a new bastion of the Entomology Branch at Ayr where he will be concerned largely with local irrigation crops, especially rice, and with horticultural crops in the Bowen area.

D.P.I. convened a conference on Heliothis at their Toowoomba headquarters on 23rd - 25th September. This included delegates from the New South Wales and South Australia Departments of Agriculture, C.S.I.R.O., Queensland Agricultural College, and both James Cook and Queensland Universities.

Geoff Strickland, of the Western Australia Department of Agriculture station at Kununurra, is currently based at D.P.I. in Mareeba for three months to study Heliothis ecology in conjunction with locals, Ian Cunningham and Ian Titmarsh. Early in the new year Ian Titmarsh will make a reciprocal visit to Kununurra to examine Heliothis, particularly factors operating towards its biological control there.

Gary Fitt, PhD student in the Department of Zoology at Sydney University, visited Dick Drew in Brisbane for discussions on fruit flies for a few days in early November before heading north for field work at Rockhampton and Mareeba in collaboration with D.P.I. entomologists, Rod Elder and Ross Storey. Gary's interests lie largely with factors influencing host selection by adult fruit flies.

C.S.I.R.O. Long Pocket Laboratories

Ken Harley leaves for 15-18 months overseas in late November. He will be based at C.S.I.R.O.'s biological control unit at Curitiba, Brazil and will carry out research on insect-plant interactions, looking particularly at the role of insect and plant biotypes in the phenomenon. He will also participate in current research programmes there on the weeds, Hyptis suaveoleus and Mimosa pigra. Jim Nolan will act as Officer in Charge at Long Pocket during Ken's absence.

Best wishes to Bill Roulston who retires from the Long Pocket tick team on 3rd December after 37 years service to C.S.I.R.O. and the cattle tick problem.

Jim Nolan, Bernie Stone and Rob Sutherst go to South Africa at the end of January to attend an International Congress on Tick Biology and Control at Rhodes University, Grahamstown.

Travellers

Arriving in Brisbane via field work in Northern Territory and New Guinea, Bob Pope of the British Museum spent a productive fortnight in late October studying Coccinellidae in the collections of the D.P.I., University of Queensland and the Queensland Museum. He exchanged much information with Ken Houston of D.P.I. who is also involved with the family.

Well-known Victorian identities "Zoo" and Mary LeSouef reached as far north as Brisbane this year in their annual collecting jaunt. During several busy days they visited entomological friends at the Museum and the Queensland University, bringing much news of southern collectors with them.

Gunther Theisinger, an avid aquatic entomologist recently transplanted from Austria to Sydney, ranged as far north as the Cairns region on a collecting trip in October and studied stoneflies in the collection of the University and the Museum as he passed through Brisbane on his return.

Arturs Neboiss, of the National Museum of Victoria, spent a fortnight collecting in south-east Queensland in late October. He was concentrating on caddis flies and ranged as far north as Gympie and Tin Can Bay.

Les Robertson, an entomologist with the Ministry of Agriculture in New Zealand, arrived in Brisbane on 18th November to spend three weeks in southern Queensland searching for natural enemies of soldier fly, Inopus rubriceps. He will range as far north as Bundaberg and will work in conjunction with the Sugar Bureau.

Geoff Monteith

SOUTH AUSTRALIA:

Department of Agriculture

Peter Bailey and Paul Madge attended an Integrated Pest Control Workshop - Pome and Stone fruits at Yanco on 27th - 29th August.

Mr. Murray Olsen, Ministry of Agriculture and Fisheries, New Zealand visited the Northfield Research Laboratories in August.

Professor MacFadyen, University of Ulster, Northern Ireland visited Northfield on 20th August and had discussion with the Entomology group.

Peter Allen and Dennis Hopkins attended several sessions of the International Congress on Dryland Farming held in Adelaide in late August/early September.

Don Swincer and family departed for U.S.A. on 2nd September. Don will be spending the next three years studying for a PhD at the University of California.

Dennis Hopkins attended a workshop entitled "Biological Control of Heliothis spp." at Toowoomba, Queensland, on 23rd - 25th September.

Paul Madge attended the SCA-Entomology Committee meeting held in Canberra on 15th - 17th October.

Waite Agricultural Research Institute

Professor Amyan MacFadyen visited the Department of Entomology on 22nd August.

Professor Phillip Corbet of Christchurch, New Zealand will be visiting the Department mid-December.

Miss Herma de Wilde from Holland (arrived 15th October, 1980) is working as a "visiting student" for 6 months in the Department.

Dennis Hopkins

WESTERN AUSTRALIA:

Graham Hall, C.S.I.R.O. Division of Entomology, visited the Dung Beetle Research Institute in Pretoria in August for one week to inspect mite and beetle rearing facilities.

John Scott, ex University of Western Australia, is in the process of finalising his PhD thesis which is on seed predators of Banksia's in the south-west of the State. John has now been appointed by the Entomology Branch of the Department of Agriculture to work on biological control of weeds.

Dr. R. Hart, the co-ordinator of blowfly studies from the Australian Wool Corporation recently visited the Department of Agriculture to talk to Nick Monzu and his team about their blowfly studies. The blowfly work has now been funded for a further three years and new work will be directed toward developing an early warning system for indicating the need for control. Nick recently presented a paper on chemical control of blowflies at the Australian Society of Animal Production conference held at the University of Western Australia.

The Department of Agriculture's sterile male release programme evaluation for the mediterranean fruit fly is progressing well. The methods of release and application have now been perfected. Perth television viewers recently saw the amusing spectacle of the appropriate government minister releasing the first batch of flies; the flies had evidently been kept in a cool room and were unable to "perform" for the viewers.

Jonathan Majer

PAPUA NEW GUINEA:

The entomologists presently employed in Papua New Guinea gathered at Highlands Agriculture College to attend the D.P.I. Entomology Section Meeting from 22nd - 29th September. Current research work was reviewed and a number of resolutions were drawn up. Foremost of these is the development and promotion of the pesticide legislation from its present draft status to an operational act. Also proposed is the establishment of a multidisciplinary research team to work on traditional and subsistance food crops. It is suggested that this team be led by a person with knowledge in the field of plant breeding with the aim of establishing varieties which are resistant to the major pests. It is envisaged that the plant pathologists will be involved alongside the entomologists in this research.

Jan Greve is presently in Australia to attend the SCA Entomology Committee Meeting after which he will attend a meeting on stored products. D.P.I. Konedobu has just installed its replacement taxonomist in the form of Dr. John Ismay who specialises in the Chloropidae. A recent visitor to the section was Dick Vane-Wright from the Blue Mountains. Dick has been collecting live danaids and observing the responses of butterflies to visual attractants during his field work at Bulolo and Goroka.

Paul Hudson attended the 16th International Congress of Entomology in Kyoto after which he visited St. Marianna University for discussions with Prof. Kanda on the cytological project for the Anopheles punctulatus complex which is now under way. Paul then attended the 1st Regional Training Course on Vector Genetics. This course was sponsored jointly by WHO and SEANEO Tropical Medicine and was held at the School of Tropical Medicine, Mahidol University in Bangkok.

On 15th December Ted Fenner "goes finish". He will be on his way to Darwin to take up the position of Scientific Officer for Plant Quarantine in D.A.S. All of us here wish Ted the very best for his new life in the wild north and hope that he will visit Papua New Guinea from time to time as the butterflies dictate.

Elaine Brough

NEWS FROM AFFILIATED SOCIETIES

Entomology Section, Royal Zoological Society of New South Wales

The August meeting was addressed by Arthur Woods, of the University of New South Wales. He spoke on Alien Insects, in relation to the Australian environment and pointed out that a large proportion of Australia's commonest animals, plants and micro-organisms are exotic species that man has introduced, accidentally or intentionally, since the European colonisation in 1788.

Generally, successful introduced species are those that can survive in disturbed environments and few natural habitats have been invaded by alien organisms. The genetics of the source population is important in determining if a founder population will survive. Samples from large source populations are likely to contain a large genetic load so that inbreeding in the early days of the new colony will lead to the elimination of many deleterious genes. Ultimately the evolution of the founder population will differe from that of the parent. However most invaders do not survive and the colonies disappear, often without even being seen by biologists.

It has been reported that Sirex noctilio has been recorded from radiata pine trees near the Hume Weir and other places in southern New South Wales.

The November meeting was addressed by Mr. Ian Mahood, of the National Parks and Wildlife Service, who spoke on Proposed Legislation to Protect Certain Species of Insects. The substance of the address was given by Mr. Mahood in an article in the A.E.S. News Bulletin, Volume 16, part 3, August 1980, pp. 106-107.

In the discussion following the lecture, speakers expressed doubt as to the real need for legislation based on the "protection" of designated species, especially as there had already been examples of unsuitable legislation elsewhere, based on this concept. However if the Service chooses to promulgate legislation, the wrong approach was being made by designating particular species as being "protected". As the survival of all life was dependent on the preservation of the habitat, the only really successful conservation of insects would have to be based on continued preservation of this habitat. The meeting was obviously unanimous in this view.

It was clear also, that there was insufficient information available on most insects to decide what merits they had and what would be the best way to attend to their conservation. For example one could doubt if there was sufficient information available on the ten insects in the list of proposed "protected" species to be able to decide on habitat conservation and the need of the various species for this type of action. A re-examination of this list in detail would be well worthwhile. To be satisfactory this should be done by a committee of people with considerable knowledge of taxonomy and ecology with access to information in other relevant fields. This committee should also set up guidelines to which all "protected" species should conform.

If it were decided to go ahead with a list of such species it should be subject to revision and amendment as additional data are acquired. Any proposed additions to the list should also be subject to rigorous investigation by the expert committee.

As a result of the discussion the following motions were passed unanimously:

1. That the Entomology Section of the Royal Zoological Society of New South Wales acknowledges the concern of the National Parks and Wildlife Service for the preservation of the insect fauna of this State, but does not consider that this end will be achieved by prohibiting the collection of certain named species of insects.

   This section believes that the most effective way of preserving selected insect fauna is to protect the habitat of that fauna and encourages the Service to that end.

2. That the species on the list be reviewed and a decision on their suitability for "protection" assessed by an advisory panel consisting of persons having special competence in taxonomy and ecology, with access to information on botanical, geological and other appropriate fields. Guidelines for the inclusion of species should be set out by the advisory panel.

3. That the addition of further species to the list be carefully investigated by the advisory panel before any action is taken.

Although the meeting was not in complete accord with the approach to the problem made by the NPWLS, it appreciated the gesture made by that body in giving information on its proposed action. Its obvious willingness to consider the views of entomologists on a subject so important to all associated with entomology was considered praiseworthy.

C.E. Chadwick

Entomological Society of Queensland

Interest in the regular monthly meetings of our Society has continued at the usual high level throughout the year with attendance varying between 30 and 41. Meetings are usually held at the University of Queensland at St. Lucia but it is becoming traditional for the last meeting of the year to be hosted by members at Griffith University, Mt. Gravatt.

Our president this year is Dr. Paul MacFayden. Paul works at the Alan Fletcher Laboratories of the Department of Lands on the biological control of Groundsel bush. He has recently returned from an extended overseas trip.

Our programmed meeting topics for 1980 are:

March — "Eucalypt dieback - a disaster in the making." Presidential address by Mr. Ross Wylie. Ross is a forest entomologist and has been concerned for some time about this complex problem.

April — "Medical Entomological Safaris." Dr. Peter Boreham, now of the Queensland Institute of Medical Research, spoke on travels in Greece and East and West Africa - in relation to his studies on environmental changes affecting feeding patterns of arthropods in relation to disease transmission.

May — "Taxonomy of Australian Spiders - an historical account." Dr. Valerie Davies, Curator of Arachnids at the Queensland Museum provided a stimulating review of this subject.

June — A notes and exhibits evening. Six members produced notes and exhibits of the usual high standard.

August — "Vectors of Bluetongue Virus in Australia." Mr. Harry Standfast spoke on studies undertaken by himself and colleagues at the Long Pocket and McMaster Laboratories of C.S.I.R.O.

September — "Application of Modern Techniques in Descriptive Taxonomy." Dr. Bob Taylor of C.S.I.R.O. and a curator of ANIC provided a very interesting talk on this topic.

November — "Insects and Water pollution." Angela Arthington of Griffith University, School of Australian Environmental studies, will discuss results of her studies on Brisbane suburban streams.

December — A notes and exhibits evening.

Neil Heather

THIRD AUSTRALASIAN CONFERENCE ON THE ECOLOGY OF GRASSLAND INVERTEBRATES

Following the very successful first and second conferences in this series, in Armidale, New South Wales, in 1974 and at Massey University, New Zealand, in 1978, the third conference will be held in Adelaide at:

The Charles Hawker Conference Centre,
Waite Agricultural Research Institute,

from Sunday, 29th November to Friday, 4th December, 1981.

Further details will be available at a later date.

REQUESTS

Tropical Butterflies

Mr. Fitz Dederer, 712 Brown Street, Philadelphia, Pa. 19123, U.S.A., is very much interested in tropical butterflies and would like to correspond with butterfly collectors, breeders and specialists in Australia.

Australian Coleoptera

Mr. Aldon I.B. Spencer, 20 West Virginia Avenue, West Chester, Pennsylvania, 19380, U.S.A. writes:

"I am extremely interested in establishing a collection of Australian Coleoptera and would very much like to correspond with members of your Society who would be willing to exchange specimens with me.

As I haven't any material from Australia I would be very happy to be able to obtain even the most common species. However, I am particularly interested in the families Cicindelinae, Carabidae, Buprestidae, Coccinellidae, Tenebrionidae, Scarabaeidae, Lucanidae, Passalidae, Cerambycidae, Chrysomelidae, and Curculionidae.

I have species from just about all terrestrial families (no aquatic species) to exchange. My terms are that all specimens be in a perfect state of preservation (no broken antennae, claws, etc.), properly mounted and labelled. Since I pride myself in the quality of my collection you may rest assured that I shall reciprocate with specimens that are likewise in a perfect state of preservation, properly labelled and mounted.

Since my collection is quite large perhaps it would be best if anyone who would be interested in exchanging with me tell me what particular family/families they are interested in and I shall be happy to send them a list of the material that I have to offer for exchange."

Economically Important Species

The Biology Department of the Capricornia Institute of Advanced Education has initiated a collection of insects, with the object of providing instructional and reference material for students completing course and project work. So far the collection contains few representatives of economically important species and opportunities for collecting such material are limited. Many members of the Society who are working with economic species may be in a position to send us, for our collection, a few representatives of the species with which they are concerned.

All contributions will be gratefully accepted and acknowledged and people willing to help can be assured of assisting us in providing a sound background in entomology for our students.

A.P. Mackey,
Department of Biology,
C.I.A.E.,
Rockhampton, Qld., 4700

Rates for Advertising

Limited advertising space is now available in the News Bulletin. Each Advertisement must be approved by the Executive.

Rates	Full page (150 x 120 mm)	$50
	Insert	$35

Addresses Unknown

Would any person knowing the current addresses of the following members please contact the Secretary:

Mr. R. Zietek, previously of 25 Dale Road, Camira, Queensland, 4300.

Dr. K.L. Lindsay, previously of 2/20 Rocklands Road, Wollstonecraft, New South Wales, 2065.

SUSTAINING ASSOCIATES

Australian Entomological Supplies

Bayer Australia Ltd.

Boots Pure Drug Co. (Aust.) Pty. Ltd.

CIBA-GEIGY Ltd.

Cyanamid Australia Pty. Ltd.

Dow Chemical (Aust.) Ltd.

I.C.I. Australia Ltd.

Shell Chemical (Aust.) Pty. Ltd.

MATERIAL IN THIS BULLETIN MUST NOT BE REFERRED TO AND NOT REPRODUCED WITHOUT PERMISSION OF THE AUTHOR OF THE MATERIAL.

Articles, Notes, Letters to the Editor and other material for the News Bulletin should be sent to the News Bulletin Editor. Deadline for copy for next issue is 28th February, 1981

AUSTRALIAN ENTOMOLOGICAL SOCIETY

Annual Conference – May 8–10, 1981

The 12th Annual General Meeting and Scientific Conference of the Australian Entomological Society will be held in conjunction with the 51st ANZAAS Congress in Queensland in May, 1981. It is scheduled for a 3 day period (Friday, May 8th - Sunday, May 10th) immediately prior to the ANZAAS Congress which takes place in Brisbane during the week of May 11-17, 1981. Members are cordially invited to attend. This invitation extends to members of the following affiliated societies, Entomological Society of Queensland, Entomological Society of Victoria, Entomological Society of N.S.W. and the Royal Zoological Society of N.S.W. Non members may apply to attend for a small surcharge. Enrolments should be returned by February 28, 1981.

Venue

In keeping with the successful past pattern of hosting AGMs outside the capital city, the Wayamba Holiday and Convention Centre, Wirraway Street, Alexandra Headland, has been chosen as the 1981 venue. This is in the heart of the Sunshine Coast, about 100 km north of Brisbane. Lying in a diverse coastal setting of sandy heaths and wallum, the area's immediate hinterland includes Nambour's plantations of tropical fruits and the rainforests of the Blackall Ranges.

Overall Programme

The programme of events will commence at mid-day on the Friday and terminate with lunch on the Sunday. It will include a welcoming function hosted by the Entomological Society of Queensland, a formal Society Dinner, the Annual General Meeting, a Presidential Address by Dr. I.F.B. Common, entomological displays, a Student Award, six scientific sessions of papers, and will terminate with a barbecue lunch in a rainforest area where collecting is permitted.

Scientific Sessions

Of the six scheduled scientific sessions 2-3 will be devoted to a major symposium entitled: "Perspectives on Entomology in the Australasian Tropics". Since Brisbane is the northernmost centre for Society meetings it seems apt to choose as our 1981 theme a review of entomological aspects peculiar to the tropics of Australia and New Guinea. The symposium will take the form of a session of four invited papers on broader aspects followed by one or two sessions of contributed papers relevant to the overall theme.

The remaining 3-4 scientific sessions will comprise contributed papers on any topic of entomology. These will be arranged into thematic groups where possible. A call is made now for applications to present papers at this Conference. Authors should use the Application Form attached to this leaflet and should indicate whether they would like their paper considered for inclusion in the tropical entomology symposium. Forms should be returned by February 28, 1981.

THE CONFERENCE LOGO

Our symbol depicts an adult male of the so-called Cooloola Monster, *Cooloola propator* Rentz, which became in 1980 the first new family of Orthoptera to be discovered since 1914. It is restricted to Queensland and is particularly relevant to this conference because it occurs in the coastal sand masses just north of our venue.

Entomological Displays

An area of the Conference venue will be set aside for the mounting of displays and attending delegates are invited to submit display material for this purpose. Any entomological topic will be considered. Displays may take the form of simple poster displays illustrating research topics or may include objects such as specimens, apparatus. portable audio-visual programmes, etc. Displays will be open throughout the Conference but one or two short periods will be scheduled when contributors will attend their displays to answer questions. Display applications should be made on the accompanying form and should be lodged by February 28, 1981.

Accommodation Details

In selecting the Conference Venue the Organising Committee has tried to cater for a range of budgets. The Wayamba Convention Centre provides quality accommodation and all meals on request. It is estimated that total costs for the Conference weekend, exclusive of travel, but including shared accommodation, all meals at Wayamba (including Annual Dinner and Sunday barbecue) plus Registration Fee should be about $80. However, since all units at Wayamba have self-contained cooking facilities, bookings for delegates will be made on the basis of room only. Delegates may then elect to have meals in the Wayamba restaurant (breakfast, $3.50; lunch, $6.00; dinner, a la carte), or may economise by preparing some or all meals in their units or by having an occasional hamburger at the beach.

Rooms available are singles ($24 per night), doubles or twins ($15 per person per night), plus a limited number of 2 bedroom "family" units at $38 per night. The family units can be occupied by 3 or 4 singles making the rates, respectively, $12.60 or $9.50 per person per night. Children 5-15 years are $7 per night in all units and children under 5 years are free.

A large, modern caravan park is across the street from Wayamba for those who wish to camp or come by caravan. This park also has 30 stationary 3-6 berth caravans for rent. Tariffs for these are about $5 per person per night for a minimum of 2 persons. Bookings for these vans will be made on request.

Package Holidays

Delegates who wish to extend their conference stay into a holiday at Wayamba are advised that travel/accomodation packages are available between Wayamba and TAA, Ansett, East-West and Airlines of NSW. These offer substantial savings based on a minimum occupancy of 6 nights. Enquiries and bookings should be directed to the airlines above. Mention should be made of participation in this Conference.

Travel Arrangements

Airlines of NSW run direct, daily services each way between Sydney and Maroochydore and Wayamba guests are met and carried to and from their lodgings by Wayamba staff. It is recommended that delegates flying from the south use this service. The Friday plane departs Sydney at 8.45 am (after arrival of connecting flights from other Capitals) and arrives at Maroochydore at 11.05 am. The return service to Sydney on Sunday departs Maroochydore at 11.30 am, before the end of Conference activities. For this reason it is suggested that delegates wishing to return south on the Sunday should take the chartered bus back to Brisbane and fly south on a TAA/Ansett flight later in the day. This chartered coach will pick up delegates at the end of Sunday morning business sessions and transport them to the barbecue lunch site; after lunch it will proceed to Brisbane where it will drop air travellers at Brisbane Airport (by 5.00 pm at the latest) and take the remainder to the city centre (by 5.30 pm at the latest).

A minimum of 15 persons travelling together is required to qualify for 10% group travel concessions on air fares. As this is likely to be reached on the Friday morning Sydney/Maroochydore flight, delegates wishing to take advantage of this offer are asked to indicate their desire for this flight and the Organising Committee will arrange group bookings if numbers are sufficient.

The Committee will try to arrange seats in cars for members requiring transport to and from Maroochydore from Brisbane. This need should be indicated on the Registration Form.

RETURN OF COMPLETED FORMS

All completed forms should be returned by February 28, 1981 to the following, from whom information and extra forms are also available:

Dr. G.B. Monteith
Queensland Museum
Gregory Terrace
FORTITUDE VALLEY. QLD. 4006

REGISTRATION FORM

Name (Prof/Dr/Mr/Mrs/Miss/Ms) .....

Preferred name (for name tag) .....

Address .....

..... Phone .....

CONFERENCE FEES

Registration Fee (Full member of AES or affiliated society - $20; student members - $15; non-members - $25) ——

Annual Society Dinner - Saturday night ($10 per head, food only) ——

Barbecue lunch on Sunday ($5 per head) ——

Bus seat to Sunday barbecue and return to Brisbane ($5 per head) ——

*TOTAL ==

This amount should accompany the returned Registration Form with cheques made payable to Australian Entomological Society (Conference Fund). Payment for accommodation and meals not included above will be the responsibility of the individual at the time of the Conference.

ACCOMMODATION RESERVATIONS

Please make the following reservations for myself and for the ..... adults and ..... children (5-15 years) who will accompany me as non-participants in the conference. Spouses, etc., who intend registering as conference participants should complete separate registration forms but indicate any requirements for shared accommodation.

Wayamba Rooms

..... persons in single room/s for one/two nights ($24 per night)

..... persons in double/twin room/s for one/two nights ($15 per night)

..... persons in two-bedroom units for one/two nights ($9.50/$12.60 per night)

Sundowner Caravan Park

A stationary caravan to accommodate ..... persons (2-6)

TRAVEL DETAILS (Please indicate items relevant to you)

I require ..... seats on the bus to barbecue and Brisbane on Sunday

I require a lift from Brisbane to the conference on Friday

I require ..... seats on the group air booking from Sydney to Maroochydore on Friday.

APPLICATION FOR SUBMISSION OF SCIENTIFIC PAPERS

(Use a separate form for each paper being submitted)

Name/s of Author/s .....

Address for Correspondence .....

..... Phone .....

Title of Paper:

Abstract of Paper: A separate typed abstract of at least 200 words should accompany this application.

Do you wish to show slides? Yes. No. (Delete one). A projector for 35mm slides (5 x 5cm) only, will be available. Authors wishing to show slides should place them in the hands of the projectionist in order at least one hour before commencement of the morning or afternoon session in which they are to be presented.

Do you wish this paper to be considered for inclusion in the Symposium entitled "Perspectives on Entomology in the Australasian Tropics". Yes. No. (Delete one).

Time allotted for each paper will be a minimum of 20 minutes but extra time may be allowed depending on numbers of papers received. Session chairman will be instructed to strictly enforce time limits on delivery.

Application forms and abstracts are required by 28th February, 1981. Confirmation of acceptance will be notified by mid March.

APPLICATION FOR PRESENTATION OF A CONFERENCE DISPLAY

Name/s of Presenter/s .....

Address for Correspondence .....

..... Phone .....

Title of Display .....

Description: A separate typed description of the theme and format of the planned display (up to 50 words) should accompany this application.

I estimate that I will need ..... metres of horizontal bench space and/or ..... metres (length) of vertical display surface.

Will you need 240v power available to your display? Yes. No. (Delete one).

Will you need a binocular dissecting microscope? Yes. No. (More complex microscopes will need to be supplied by the presenter).

Will you need one or two glass-topped cabinet drawers to display pinned specimens? Yes. No.

Presenters should ensure that displays are erected before commencement of the Friday afternoon session at 2.00 pm. Presenters will be required to attend their displays for two brief scheduled periods to answer enquiries from delegates.

Supplement to the Australian Entomological Society
News Bulletin, Volume 16, Part 4, November 1980

THE AUSTRALIAN ENTOMOLOGICAL SOCIETY INC.

Nomination of Officers and Councillors

I nominate _____

for election to the office of _____

Name of nominator _____

Signature _____

Date _____

I second this nomination _____

Name of seconder _____

Signature _____

Date _____

I accept this nomination*

Signature _____

Date _____

* The nominee is requested to attach a typed statement, not exceeding 300 words, which includes the following: his/her professional qualifications, address, institution, position held, fields of entomological interest, previous offices or appointments held in the Society; and any other information which may be of assistance to members.

Supplement to the Australian Entomological Society
News Bulletin, Volume 16, Part 4, November 1980

APPOINTMENT OF PROXY

I, _____ of _____

being a member of the Australian Entomological Society Inc.,

appoint _____ of _____

as my proxy to vote for me on my behalf at the Annual General Meeting of the Society to be held on the ninth day of May, 1981 (and, if applicable, at the Council Meetings held in association with the Annual General Meeting), and at any adjournment thereof.

Signed this _____ day of _____ 198

Signature _____

THIS FORM SHOULD BE RETURNED TO THE SECRETARY OF THE SOCIETY NOT LATER THAN 20TH APRIL, 1981